

Lecture № 02(b): Syntax

1. Definition of Syntax

We have studied the phonological and morphological structures of the English language. But to know a language and to speak it correctly also involves being able to articulate complete sentences. The study of the syntax of a language is the study of its sentence structure as well as the linguistic knowledge necessary to form sentences.

2. Definitions of Sentence

a. Aristotelian definition

Aristotelian logic claims that a sentence is an utterance consisting of *subject* and *predicate*.

Examples:

1. Susie smokes.
2. Alexander is clever.
3. Elizabeth believes that astrology is garbage.

b. logical definition

A logical definition claims that a sentence is the expression of one single, complete thought. However, complex sentences may consist of several thoughts which are interwoven. Thus, this definition does not apply to all sentences. One example of a complex thought structure are complex, compound, and compound-complex sentences.

Example: Albert enlisted in the Army, and Robert, who was his older brother, joined him a day later.

c. structuralist definition (Bloomfield)

A sentence is independent of any other linguistic form because it can stand alone, other than a single word, which represents no independent syntactic unit. According to this definition, subordinate clauses are not sentences of their own because of their dependence on the main clause.

3. Grammaticality and Acceptability

Sentences can also be categorized under the aspects of grammaticality and acceptability. Sentences of a language can be grammatically correct or not. In the latter case, we call them ungrammatical sentences. This term may sound contradictory, since a sentence is, per definition, grammatically correct and complete. Sentences can, nevertheless, lack correct grammaticality,

e.g.: *I wakened was with thundering noise.*

Ungrammatical sentences appear in everyday language and literary language. When you observe your own language, you should find plenty of them.

Also, sentences may be grammatically correct, but still make no sense at all. In this case, they lack acceptability. An example from English is the sentence *Colourless green ideas sleep furiously*. Acceptability hence means that the meaning content of the sentence must be clear, understandable or acceptable to the reader.

4. Major and Minor Sentences

A **major sentence** is a *regular* sentence; it has a *subject* and a *predicate*. For example: *I have a ball*. In this sentence one can change the persons (e.g.: *We have a ball*). However, a **minor sentence** is an irregular type of sentence. It does not contain a finite verb. For example, *Mary!*, *Yes*, *Coffee*, etc. Other examples of **minor sentences** are headings (e.g. **Major and Minor Sentences**), stereotyped expressions (*Hello!*), interjections (*Wow!*), phrasal questions (*tea or coffee?*), signs (*No Smoking*), proverbs (*Better an open enemy than a false friend*), etc. This can also include nominal sentences like *The more, the merrier*.

5. Description of Sentences: Modes of Representation

a) Labeled bracketing

Bracketing is one way of representing the results of distributional analysis. Different bracket types are here reserved for particular structure levels of a sentence. Braces {}, for example, contain whole sentences. To remind of its function, the brace is additionally labeled after the opening with an "s". Parentheses () indicate noun- or verb-phrases, and brackets [] indicate nouns, verbs, adjectives, or adverbs.

Example: {_S(_{NP}[_Apoor]+(_NJohn))+(_{VP}[_Vran]+(_{Adv}away))}

b) Block diagram

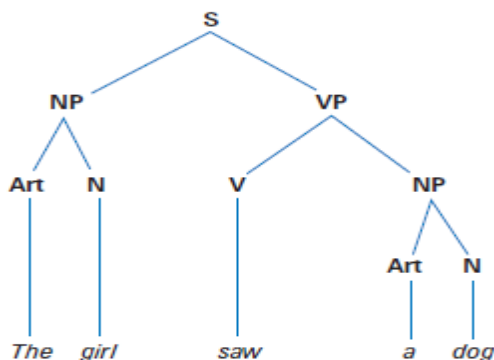
In this way of representing the constituents, the broadest structure appears at the bottom of the diagram, with each row further up showing a more segmented level. Each row thus shows the immediate constituents of its lower row.

Example:

Poor	John	ran	away
Poor	John	ran	away
Poor	John	ran	away

c) Tree diagrams

Tree diagrams have proven to be the most convenient way of representing an IC-analysis. In the diagram, so-called *nodes*, where the NP, VP, etc. are situated, are connected by *links*, which serve for connection similar to the branches of a tree. At the top of the diagram, the "s" represents the sentence. The immediate constituents of the sentence are the NP and VP.



5. Generative Grammar

a) phrase structure grammar

Phrase-structure analysis aims to sort out the *rewrite rules* or *phrase-structure rules (PS-rules)* of a sentence. A sentence is here analyzed for its constituents, or phrase-structure. From there on, alternatives are sought that are capable of substituting these phrase-structures, hence 'rewrite rules'. An American linguist Noam Chomsky came up with an idea of generative grammar, which was supposed to look at the grammar of language from the mathematical point of view, constructing a limited number of rules describing all the possible patterns of forming correct sentences. For example, *John runs*.

Sentence	consists of	noun-phrase	plus	verb-phrase	
S	→	NP	+	VP	"John runs"

VP	→	V	+	NP	"change trains"
NP	→	Adj	+	N	"fast run"
NP	→	Det	+	N	"the dog"
VP	→	V	+	S	"I <u>believe John ran</u> <u>away</u> "
VP	→	V	+	PP	"I <u>looked at John</u> "
PP	→	Prep	+	N	"at John"

The system allows for *alternatives*, with one element having the possibility of being rephrased in various ways. These alternatives are due, in part, to the structure of the *transitive* and *intransitive* verbs. Transitive verbs take a

direct object. Thus, transitive verbs always appear with two noun-phrases. These are called the *arguments* of the verb:

"The dog frightened the man."

Intransitive verbs do not take objects:

"The dog barked."

Some verbs can be used transitively and intransitively:

"George won."

"George won the race."

The variability of rewriting is thus important for the creativity of a language.

b) ambiguity

Moreover, what Chomsky showed was the difference between the *deep* and *surface* structure of a sentence. What he called the surface structure of a sentence was its grammatical form, and the deep structure was understood as the meaning of sentence. For example, the two sentences: "Mary opened the door" and "The door was opened by Mary" differ in their surface structure, but not in their deep structure. Still, it is the deep structure that might cause the biggest problems. Certain sentences, although easily understood, can be ambiguous because of their structure, like for instance *He hit a guy with a car*. This sentence can mean that he was driving a car and hit someone, or that he hit somebody who had a car.

Activity:

Explain the structural basis of ambiguity in the sentences below.

1. Visiting neighbours could be a nuisance.
2. Anne likes horses more than Mark.
3. The Shooting of hunters was appalling.
4. Small boys and girls are easily frightened.
5. Yesterday, I met our English history teacher.